ABSTRACT

A method for cylindrical processing of an optical medium, including optical fiber and optical materials of substantially cylindrical form. The method of the preferred embodiments includes the steps of rotating an optical medium about a longitudinal relative rotation axis thereof relative to a processing tool; spatially selectively applying the processing tool to a portion of a surface of the optical medium in operative cooperation with relative rotation of the optical medium and the processing tool, thereby producing a patterned (i.e., spatially selective) structural alteration of the optical medium, the pattern including altered, differentially-altered and unaltered portions of the optical medium. Specialized techniques for spatially selectively generating the structural alteration may include masking/etching, masking/deposition, machining or patterning with lasers or beams, combinations thereof, and/or functional equivalents thereof.